

## A SYSTEM AND METHOD FOR FACILITATING A TRANSACTION

FIELD OF THE INVENTION

5           The present invention relates generally to a system and method for facilitating a transaction, and has particular - but by no means exclusive - application to facilitating a sale of real estate.

10       BACKGROUND OF THE INVENTION

Processes for selling relatively expensive items such as real-estate have traditionally been conducted in person. For example, the majority of auctions held today 15 require parties wishing to make bids to gather at a venue (typically the location of the real estate that is being auctioned) where they can submit verbal bids to an auctioneer.

20           Whilst conducting an auction in person (or any other process of selling) does have some advantages, for instance allowing the auctioneer to readily interact with bidders in order to control the progress of the auction, it does have a number of drawbacks. One such drawback is that 25 it generally excludes parties who, for one reason or the other, are not able to attend the venue at which the auction is being held. Therefore, to avoid excluding parties who can not readily attend the venue it would be advantageous if a mechanism was in place to enable parties 30 unable to attend the venue to submit bids, and to allow the auctioneer to interact with such parties so that the auctioneer can control the progress of the auction.

SUMMARY OF THE INVENTION

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According to a first aspect of the present invention there is provided a system for facilitating a

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transaction, the system comprising:

obtaining means operable to obtain information pertaining to an object that is for sale;

5 forwarding means operable to forward the information pertaining to the object to a first computing device that is arranged to present the information to a prospective purchaser; and

10 establishing means operable to establish a communicating means associated with the first computing device and a second computing device that is used by a person managing a sale of the object, the communicating means being such that it allows the prospective purchaser and the person managing the sale to use the first computing device and the second computing device, respectively, to 15 communicate with each other in relation to the sale of the object, thereby facilitating the transaction.

Thus, in the case where the sale of the object is being conducted by auction the present invention provides 20 the advantages of allowing the person managing the sale of the object (for example, an auctioneer) to accept bids for the object from parties who are unable to attend a venue at which the auction is being held. Furthermore, the present invention allows the person managing the sale to interact 25 with the parties unable to attend the venue, thereby allowing the person managing the sale to control the progress of the auction.

30 Preferably, the communicating means is operable to assist the person managing the sale to conduct the sale in accordance with an auction process or a tender process.

35 Thus, providing the person with assistance in managing the sale provides the advantage of allowing the person managing the sale to focus on interacting with the crowd. By way of example, the communicating means provides assistance by automatically presenting the prospective

purchaser with information that indicates when the tender process is due to close.

5 Preferable, the tender process comprises a closed tender process or an open tender process.

10 As persons skilled in the art will readily appreciate, a closed tender process is one in which persons are unable to view submitted tenders until the deadline for submitting offers has passed. In contrast to a closed tender, an open tender is such that tender submission are open for viewing before the deadline for submitting offers has passed.

15 Preferably, the communicating means is operable to restrict an ability of the prospective purchaser to communicate with the person managing the sale based on whether the prospective person is registered to participate in the sale of the object.

20 Thus, being able to restrict the ability of the prospective purchaser to communicate with the person managing the sale provides the advantage of minimising the likelihood of 'dummy' offers to purchase the object being made.

25 Preferably, the communicating means is operable to create a record of communication between the prospective purchaser and the person managing the sale.

30 Thus, the record provides the advantage of allowing the communication between the prospective purchaser and the person managing the sale to be analysed.

35 Preferably, the communicating means is operable to allow a party to use a third computing device to access and edit the information pertaining to the sale.

Thus, being able to edit the information pertaining to the sale provides the advantage of allowing the information to be updated if needed. For example, if 5 the information contained details regarding a final date for receiving offers to purchase the object, the final date can be changed if required.

Preferably, the obtaining means is operable to 10 obtain the information pertaining to the object from a computer system via a first communication network.

Preferably, the obtaining means is operable to determine whether it is authorised to receive from the 15 computer system the information pertaining to the object.

Thus, being able to determine whether it is authorised to receive the information provides the advantage of ensuring that only authorised information is 20 obtained by the system.

Preferably, the forwarding means is operable to use a second communication network in order to forward the information pertaining to the object to the first computing 25 device.

Preferably, the obtaining means is operable to obtain additional information associated with an agency engaged by an owner of the object to oversee the sale of 30 the object, whilst the forwarding means is operable to forward the additional information to the first computing device which is arranged to present the additional information to the prospective purchaser.

35 Preferably, the information pertaining to the sale comprises: an image of the object; details of the sale; and/or a contract for the sale of the object.

Preferably, the object comprises real estate.

According to a second aspect of the present  
5 invention there is provided a method for facilitating a transaction, the method comprising the steps of:

obtaining information pertaining to an object that is for sale;

10 forwarding the information pertaining to the object to a first computing device that is arranged to present the information to a prospective purchaser; and

15 establishing a communicating means associated with the first computing device and a second computing device that is used by a person managing a sale of the object, the communicating means being such that it allows the prospective purchaser and the person managing the sale to use the first computing device and the second computing device, respectively, to communicate with each other in relation to the sale of the object, thereby facilitating  
20 the transaction.

Preferably, the communicating means is operable to assist the person managing the sale to conduct the sale in accordance with an auction process or a tender process.

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Preferably, the tender process comprises a closed tender process or an open tender process.

30 Preferably, the communicating means is operable to restrict an ability of the prospective purchaser to communicate with the person managing the sale based on whether the prospective person is registered to participate in the sale of the object.

35 Preferably, the communicating means is operable to create a record of communication between the prospective purchaser and the person managing the sale.

Preferably, the communicating means is operable to allow a party to use a third computing device to access and edit the information pertaining to the object.

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Preferably, the step of obtaining the information pertaining to the object comprises obtaining the information from a computer system via a first communication network.

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Preferably, the step of obtaining the information pertaining to the object comprises determining whether the information pertaining to the object is authorised to be obtained.

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Preferably, the step of forwarding the information comprises using a second communication network in order to forward the information pertaining to the sale to the first computing device.

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Preferably, the method further comprises the step of obtaining additional information associated with an agency engaged by an owner of the object to oversee the sale of the object, whilst the step of forwarding the information comprises forwarding the additional information to the first computing device which is arranged to present the additional information to the prospective purchaser.

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Preferably, the information pertaining to the sale comprises: an image of the object; details of the sale; and/or a contract for the sale of the object.

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Preferably, the object comprises real estate.

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According to a third aspect of the present invention there is provided a computer program that comprises at least one instruction for causing a computing

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device to carry out the method according to the second aspect of the present invention.

According to a fourth aspect of the present invention there is provided a computer readable medium comprising the computer program according to the third aspect of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

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Notwithstanding any other embodiments that may fall within the scope of the present invention, an embodiment of the present invention will now be described, by way of example only, with reference to the accompanying figures, in which:

figure 1 provides a schematic diagram of a computer system in accordance with the embodiment of the present invention;

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figure 2 provides a representation of software used in the system shown in figure 1;

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figure 3 shows a presentation template used in the system of figure 1;

figure 4 shows a flow chart of an auction process conducted using the system shown in figure 1; and

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figure 5 shows a flow chart of steps performed by persons using the system of figure 1.

AN EMBODIMENT OF THE INVENTION

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Figure 1 illustrates a computer system 11 in accordance with an embodiment of the present invention. The computer system 11 has particular application to facilitate

the sale of real-estate 'on-line', but as persons skilled in the art will readily appreciate the computer system 11 has application to selling other objects such as, for example, motor vehicles and/or boats.

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The computer system 11 comprises a first computer server 13 and a second computer server 15. The computer servers 13 and 15 each include traditional computer hardware such as a motherboard, a network interface, RAM, a hard disk, and a power supply. The hard disk of each computer server 13 and 15 is loaded with the Microsoft Windows Server operating system.

15 The first computer server 13 is basically arranged to operate as a web site for a particular real-estate agent. To enable the computer server 13 to operate as a web server the Internet Information Services (IIS) feature of the Microsoft Windows Server operating system is utilised.

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The second computer server 15 is also arranged to operate as a web server and also utilises the Internet Information Services feature of the Microsoft Windows Server operating system. However, unlike the first computer server 13 which acts as the web site for the real-estate agent, the second computer server 15 does not act as a web site for any real-estate agent. As described in more detail in the subsequent paragraphs of this description, the second computer server 15 effectively operates as a 'back-end' web server that facilitates the on-line sale of real-estate. In this regard, the second computer server 15 is loaded with a software application that is executed to support the on-line sale of real-estate. The software application can be considered to be made up of a number of software modules, which are depicted in figure 2.

In addition to the computer servers 13 and 15,

the computer system 11 comprises a participant computer 17, a subscriber computer 19, a mediator computer 21 and an administrator computer 23. Each of the computers 17, 19, 21 and 23 comprise traditional computer hardware such as a 5 motherboard, a network interface, RAM, a hard disk, and a power supply. Each of the hard disks for the computers 17, 19, 21 and 23 is loaded with the Microsoft Internet Explorer web browser.

10                 The computer system 11 also comprises a communication network 25, which in the present embodiment of the invention is in the form of the Internet. As persons skilled in the art will readily appreciate, given that the communication network 25 is in the form of the Internet the 15 communication network 25 comprises a plurality of interconnected data switches (also known as routers) that support the Internet Protocol (IP) data communication standard.

20                 The first and second computer servers 13 and 15 and the computers 17, 19, 21 and 23 are connected to the communication network 25 and make use of the network 25 to exchange data between each other. The first and second computer servers 13 and 15 and the computers 17, 19, 21 and 25 23 are connected to the communication network 25 via their network interface cards and data communication links 27, which are electrically coupled to the network interface cards and network access points (not shown in the figures) of the communication network 25. The data communication 30 links 27 can be any one of a range of different forms including, for example, a dial-up modem link, xDSL link or ISDN link.

35                 The computer system 11 is actually targeted to real-estate agents rather than vendors of real-estate. The computer system 11 is aimed at enabling real-estate agents to conduct on-line sales without actually having to put in

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place their own computer system, which can be an expensive exercise particularly for smaller real-estate agencies.

In order to make use of the computer system 11 to sell real-estate on-line, a real-estate agent first needs to become a registered user (subscriber) of the second computer server 15. To become a registered user the real-estate agent contacts an administrator of the second computer server 15 and asks to become a registered user. In this regard, it is envisaged that the real estate agent can contact the administrator using various means including e-mail or making personal contact with the administrator. In response to the real-estate agent's request to become a registered user, the administrator effectively establishes an account on the second computer server 15 for the real-estate agent. The second computer server 15 is such that the administrator can remotely establish the account for the real-estate agent using the administrator computer 23.

In order to establish the account for the real-estate agent using the administrator computer 23, the administrator uses the Internet Explorer web browser loaded onto the administrator computer 23 to log onto the second computer server 15. The second computer server 15 is such that when the administrator initially logs onto the server 15 it causes the administrator computer 23 to display on its monitor a dialog box prompting the administrator to type in their username and password. Once the username and password have been typed into the dialog box the administrator computer 23 submits the username and password to the second computer server 15 for verification.

On receiving the username and password of the administrator, the authentication module 29 of the software application loaded onto the second computer server 15 processes the username and password to verify their validity. Upon verifying the username and password as

being valid, the second computer server 15 effectively provides the administrator with access (via the administrator computer 23) to the appropriate functionality to set up the real-estate agent's account. In this regard 5 the user management module 31 of the software application loaded on the second computer server 15 is basically responsible for enabling the administrator to create an account for the real-estate agent. More specifically, the user management module 31 causes the second computer server 10 15 to dispense a web page to the administrator computer 23 that enables the administrator to enter in the various details of the real-estate agent. These details include, for example, the full name, address and telephone numbers 15 of the real-estate agent.

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Once the administrator has created an account for the real-estate agent the administrator provides the real-estate agent with a username and password that can be used by the real-estate agent to gain access to the second 20 computer server 15. The user management module 31 is such that it enables the administration to nominate the username and password for the real-estate agent.

In addition to allowing the real-estate agent to 25 facilitate the sale of real-estate on-line (which is discussed in more detail in subsequent paragraphs of this description), the software application loaded on the second computer server 15 includes a property listing module 33 that essentially allows the real-estate agent to advertise 30 their real-estate on-line. In order to make use of this property listing facility, the real-estate agent first needs to log onto the second computer server 15. The real-estate agent does this by using the Internet Explorer web browser loaded on the subscriber computer 19. In response 35 to logging onto the second computer server 15, the authentication module (previously discussed) causes a dialog box to be displayed on the monitor of the subscriber

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computer 19. In response to the dialog box, the real-estate agent types in the username and password that was previously supplied by the administrator. Once the real-estate's username and password have been entered into the 5 dialogue box, they are submitted to the second computer server 15 (more specifically, the authentication module 29) for verification. Assuming that the real-estate agent's username and password are validated as being okay, the property listings module 33 causes a web page to be 10 displayed on the subscriber computer 19. This web page basically allows the real-estate agent to upload a data file containing information about the real-estate that is being offered for sale (that is, the real-estate agent's property listings). The data file can, for example, 15 contain an image, an address and price of the real-estate that is being offered for sale. The data file can also contain details about the method that is going to be used to facilitate the sale of the real-estate, for example, auction closed tender, or open tender.

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To effect the uploading of the data file to the second computer server 15 (via the communication network 25) the subscriber computer 19 and the second computer server 15 cooperate with each other using a file transfer 25 protocol (FTP), hypertext transfer protocol (HTTP), or secure hypertext transfer protocol (HTTPS). The second computer server 15 is arranged to accept the data file (that is, the real-estate agent's property listing) in a format that accords with a comma separated values (CSV) 30 file format.

Once the second computer server 15 has received the data file, it places the data file in a database (not shown in the figures) and then issues a uniform resource 35 locator (URL) via the communication network 25 to the subscriber computer 19. Essentially, the URL is the Internet location of the data file submitted by the real-

estate agent. The URL is designed to be incorporated into the real-estate agent's web site, which as previously discussed, runs on the first computer server 13. Thus, a prospective purchaser can readily view the real-estate 5 which the agent has for sale by directing the Internet Explorer web browser on the participant computer 17 to the web server running on the first computer server 13, which in turn will typically represent the URL as an icon of some description on the computer monitor of the participant 10 computer 17 server 13. When the prospective purchaser clicks on the URL, the real-estate agent's web server running on the first computer server 13 will effectively contact the second computer server 15 so as to cause the data file (the real-estate agent's property listing) to be 15 forwarded, via the communications network 25, to the Internet Explorer browser on the participant computer 17. The Internet Explorer web browser on the participant computer 17 is such that it will present the data file to the prospective purchaser on a computer monitor for 20 viewing.

To ensure that the data file forwarded from the second computer server 15 to the Internet Explorer web browser on the participant computer 17 is associated with 25 the real-estate agent, the data file is presented by the Internet Explorer web browser on the participant computer 17 to the prospective purchaser in a frame of the real-estate agent's web site, which operates via the first computer server 13. This conveys to the prospective 30 purchaser that the data file is that of the real-estate agent's, and is not another real-estate agent's listing. An example template of this presentation is shown in figure 3. It is noted that the data file (the real-estate agents 35 property listing) is in a hypertext mark-up language (HTML) format so that it can be readily displayed in the Internet Explorer web browser located on the participant computer 17.

The second computer server 15 is also arranged to enable the real-estate agent to remotely log onto the server 15 using the Internet Explorer web browser loaded on 5 the subscriber computer 19 to edit the data file (the electronic property listing) that was uploaded to the second server 15 from the participant computer 17. For example, editing the data file can comprise changing details of a price range of the real-estate. The ability to 10 edit the data file is provided by the property listings module 33. To ensure that only the real-estate agent can edit the data file, the authentication module 29 of the software application of the second computer server 15 prompts the real estate agent to provide their username and 15 password before granting permission to edit the data file.

It is noted that in addition to forwarding the data file via the communication network 25, the second computer server 15 is arranged to forward, via the 20 communication network 25, legal paperwork (such as a contract of sale) to the Internet Explorer web browser loaded on the participant computer 17. This enables the prospective purchaser to easily obtain and examine the legal paperwork associated with the sale of the real-estate. The legal paperwork is uploaded to the second 25 computer server 15 in the same manner as the electronic listing; that is, from the subscriber computer 19 via the communication network 25.

As mentioned previously, the computer system 11 can be used by the real-estate agent to sell real-estate 30 on-line. In this regard, the second computer server 15 is arranged to establish a communicating means, which is essentially in the form an electronic message board that 35 enables persons to post and exchange text based messages. The communicating means is such that it can be used to conduct the sale of the object in one of a number of

different methods; for example, an auction, an open tender, or a closed tender. The various steps involved in the auction process are shown in the flow chart of figure 4.

5                 The communicating means effectively enables the prospective purchaser and a person managing the sale of the real estate (which in the case of an auction is an auctioneer) to communicate with each other regarding the sale. The communicating means also enables other  
10          prospective purchasers to communicate with the person managing the sale of the real-estate. The communication between the prospective purchaser and the person managing the sale of the real-estate essentially consists of bids/offers (to purchase the real-estate) made by the  
15          prospective purchaser and response thereto by the person managing the sale of the real-estate. As alluded to previously the bids are made by the prospective purchaser using the participant computer 17, whilst the responses that the person managing the sale makes to the bids is done  
20          via the mediator computer 21. The communication means established by the second server computer 15 supports the transfer of bids and responses thereto between the participant computer 17 and the mediator computer 21.

25                 More specifically, to enable the prospective purchaser and the person managing the sale of the real-estate to communicate with each other, the second computer server 15 sends a Java application (via the communication network 25) to the participant computer 17 and the mediator computer 21. The participant computer 17 is used by the prospective purchaser, whilst the mediator computer 21 is used by the person managing the sale of the real-estate. The Java application essentially effects the previously mentioned electronic message board when executed by the  
30          computers 17 and 21. As persons skilled in the art will appreciate, the Java application can be executed on a range of computer platforms and can therefore be used on

different hardware platform without being re-compiled.

The communicating means is such that the prospective purchaser can only use the communicating means to interact (for example, place a bid) with the person managing the sale of the real estate if they are registered to participate in the sale of the real estate. The initial steps of registering to participate in the sale of the real-estate involves the prospective purchaser obtaining a username and password in much the same way as the real estate agent obtained their username and password from the administrator of the second computer system 15. In this regard, it is noted that the user management module 31 enables the prospective purchaser to be registered as a participant user of the second computer server 15. The authentication module 29 of the second computer server 15 is arranged to cause the participant computer 17 to prompt the prospective purchaser for their username and password before allowing the prospective purchaser to communicate (for example, make a bid) with the person managing the sale of the real-estate. The prompt that the participant computer 17 issues the prospective purchaser is in the form of a dialog box. It is noted that the prompt is only issued at the beginning of each session and is not issued each time the prospective purchaser wishes to place a bid.

The person managing the sale of the real-estate must also log onto the second computer server 15 in the same manner as the prospective purchaser. In this regard the second computer server 15 causes a dialog box to be displayed on the computer monitor of the mediator computer 21, into which the person managing the sale of the real-estate would enter their username and password. The username and password of the person managing the sale of the real-estate is previously allocated by the real-estate or the administrator. Once the person managing the sale of the real-estate has entered their username and password

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into the dialog box, the mediator computer 21 forwards them onto the second computer server 15 for verification. Upon the username and password being verified by the authentication module 29, the second computer server 15 grants the person managing the sale with access to participate in the sale of the real-estate.

To assist the person managing the sale, the second computer server 15 provides various functions for managing the sale of the real-estate. These functions are provided by the auctions module 35 and the tenders module 37 of the software application running on the second computer server 15. For example, where the real estate is being sold by auction the auction module 35 may check the validity of a bid before presenting it to the person managing the sale. If, for instance, the bid is lower than the highest bid to date the auction module 35 can automatically reject the bid without presenting it to the person managing the sale, and notify the prospective purchaser that their bid is invalid. Another function that the auction module 35 provides is, for example, allowing the person managing the sale of the real-estate to halt the auction process. In this regard the auction module 35 interacts with the participant computer 17 to prevent the prospective purchaser from using the participant computer 17 to submit further bids.

As can be seen in figure 2, the software application loaded on the second computer server 15 also comprises a business reports module 39 for creating different reports about activity within the second computer server 15. The various reports generated by the business reports module 39 include, for example, a record of the interaction (e.g. bids and responses thereto) between the prospective purchaser and the person managing the sale of the real-estate. Consequently, the business reports module 39 is arranged to track activity involving the second

computer server 15.

As can be seen from figure 2 the software application on the second computer server 15 also comprises 5 a notifications module 41 and a site admin module 43. In regard to the notifications module 41, this module is arranged to allow various system notifications to be managed. For example, the real-estate agent managing the sale of the real-estate can make use of notification module 10 41 to issue the prospective purchase that an auction or tender is about to start. The notifications that the notifications module 41 issues can be sent via a variety of means such as, for example, e-mail or web message. The site admin module 43 enables the administrator to perform 15 general admin function on the second computer server 15 including, for example, editing and deleting of data files.

In some jurisdictions, it is a legal requirement for prospective purchasers to prove their identity by, for 20 example, presenting a driver's licence and passport. It is envisaged that the second computer server 15 could be capable of receiving, via the communication network 25, certified electronic copies of the prospective purchasers driver's licence, passport and like documentation for 25 further processing to confirm the prospective purchaser's identity.

Figure 5 provides a flow chart of various steps performed by persons using the computer system 11 when 30 selling real-estate.

Those skilled in the art will appreciate that the invention described herein is susceptible to variations and modifications other than those specifically described. It 35 should be understood that the invention includes all such variations and modifications which fall within the spirit and scope of the invention.